AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (canceled).

2. (currently amended): ~~The~~ An image distortion compensating apparatus ~~of claim 1~~, which controls a convergence yoke, comprising:

a compensation value generator for calculating a convergence compensation value for compensating a convergence distortion which occurs while an image signal is emitted onto a display apparatus, the compensation value generator outputting the convergence compensation value after compensating for a phase and a gain of the convergence yoke;

an amplifier of a D-class for amplifying the convergence compensation value;

a convergence yoke for controlling a path of electron beams corresponding to the image signal, based on the convergence compensation value as amplified at the amplifier; and

~~further comprising~~ a feedback sensor provided between the convergence yoke and the compensation value generator, for reducing a noise outputted from the convergence yoke through a differential amplification.

3. (currently amended): The image distortion compensation apparatus of claim 2, wherein the compensation value generator comprises:

a convergence module for synchronizing to a horizontal synchronization signal and a vertical synchronization signal applied to the display apparatus and outputting a predetermined convergence distortion value;

a triangular wave generator for generating a triangular wave;

a combiner for combining the convergence distortion value and an output from the feedback sensor;

a comparator for comparing the convergence distortion value outputted from the combiner with a phase level of the triangular wave; and

a pulse generator for generating the convergence compensation value in ~~the~~ a form of a pulse width modulating signal based on the comparison result from the comparator.

4. (original): The image distortion compensating apparatus of claim 3, wherein the combiner comprises:

a first resistor for being inputted with an output from the feedback sensor;

an operational amplifier for being inputted with an output from the first resistor as a negative input and the convergence distortion value as a positive input;

a second resistor and a first capacitor, both of which are connected in series between a negative input terminal and an output terminal of the operational amplifier; and

a second capacitor and a third resistor, both of which are connected in parallel between the negative input terminal and the output terminal of the operational amplifier.

5. (currently amended): The image distortion compensating apparatus of claim 4, wherein the combiner has a transfer function of[[,]]

$$H(S)=\frac{Z3}{R1}=\frac{R3\cdot R2\cdot C1S+R3}{R1\cdot R2\cdot R3\cdot C1\cdot C2S^2+(R1\cdot R3\cdot C2+R1\cdot R2\cdot C1+R1\cdot R3\cdot C1)S+R1}.$$

where R1 is a resistance of the first resistor, R2 is a resistance of the second resistor, R3 is a resistance of the third resistor, C1 is a capacitance of the first capacitor, C2 is a capacitance of the second capacitor, and Z3 is a total impedance of the combiner.

6. (currently amended): The image distortion compensating apparatus of claim 5, wherein the transfer function of the combiner has ~~the~~ a control characteristic of 2-pole and 1-zero.

7. (currently amended): The image distortion compensating apparatus of claim 6, further comprising a low pass filter provided between the amplifier and the convergence yoke, for reducing the noise of the amplifier by a predetermined amount ~~in accordance with a predetermined value~~.

8. (currently amended): An image distortion compensating method for controlling a convergence yoke, comprising the steps of:

calculating a convergence compensation value for compensating a convergence distortion which occurs while an image signal is emitted onto a display apparatus in consideration of a phase and a gain of the convergence yoke;

D-class amplifying in response to the convergence compensation value; [[and]]

forming a predetermined magnetic field by the D-class amplification, and controlling a path of electron beams corresponding to the image signal by the magnetic field as formed[[.]]; and

sensing an output of the convergence yoke and removing a noise from the convergence yoke output through a differential amplification.

9. (canceled).

10. (currently amended): The image distortion compensating method of claim [[9]]8, wherein the step of D-class amplifying further comprises ~~the~~ a step of low pass filtering the amplified convergence compensation value.